

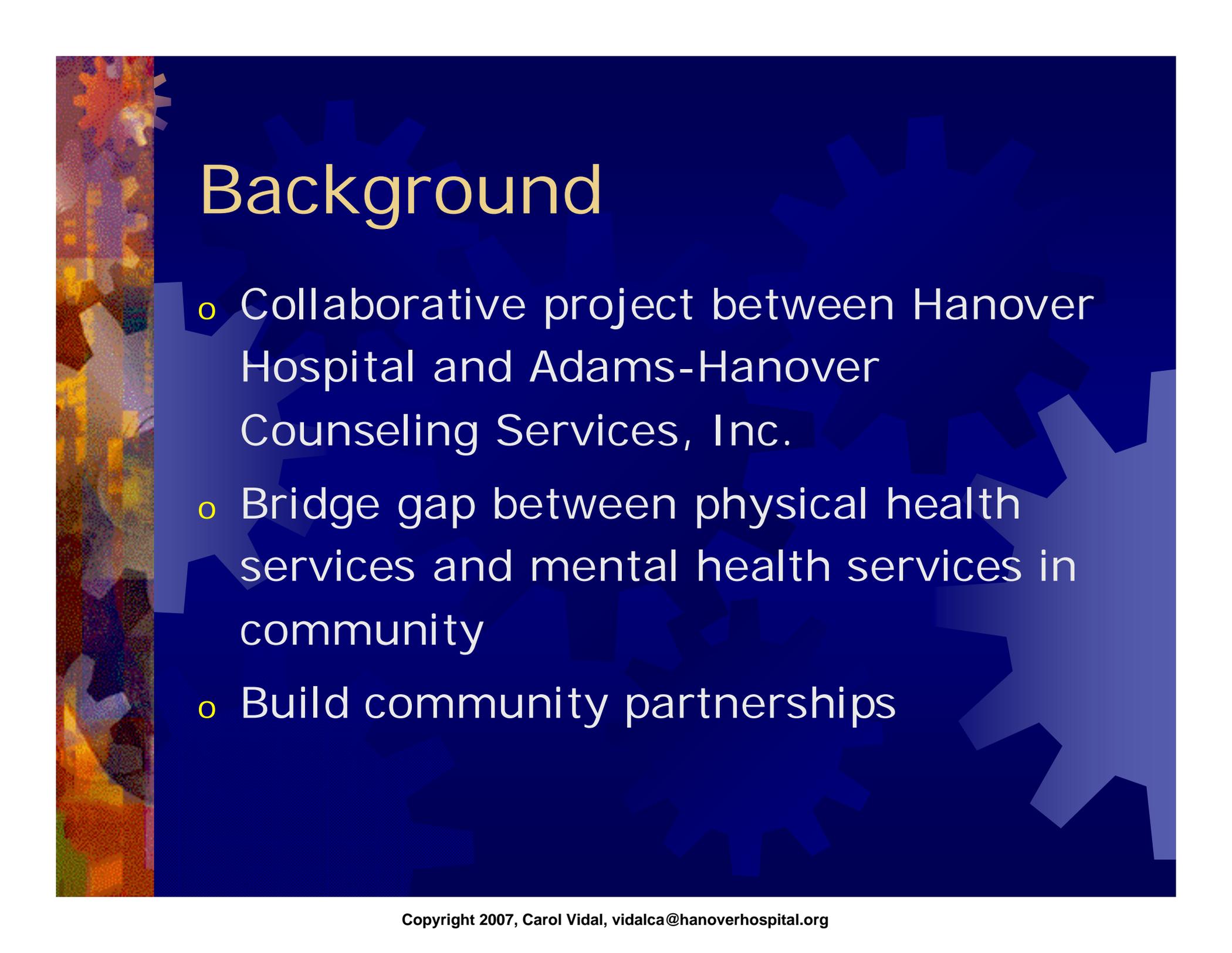


# Cognitive-behavioral Group Treatment for Obesity

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# Agenda

- Background
- Describe study
- Review results of study
- Discussion and questions



# Background

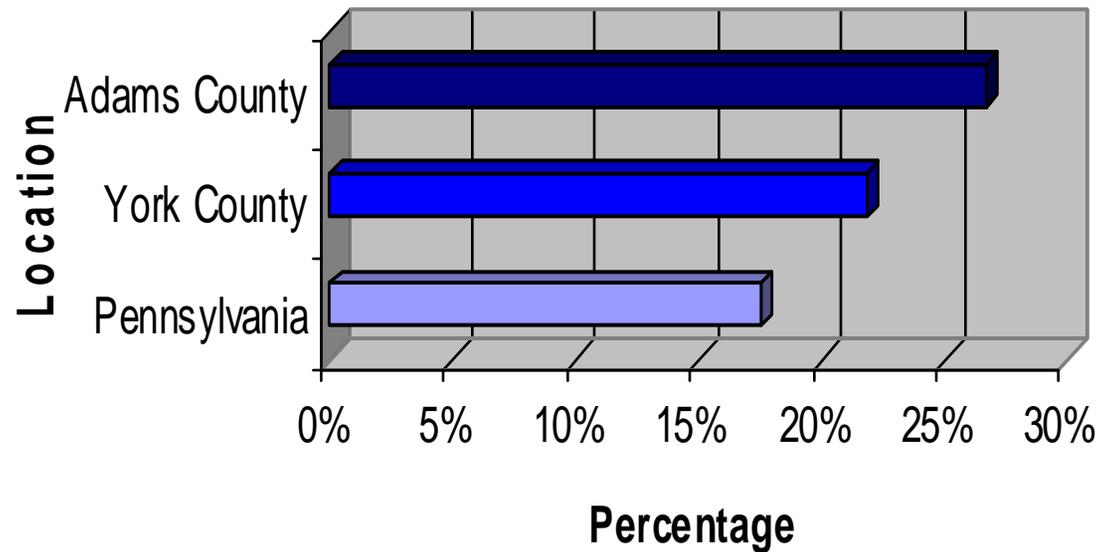
- Collaborative project between Hanover Hospital and Adams-Hanover Counseling Services, Inc.
- Bridge gap between physical health services and mental health services in community
- Build community partnerships

# Rationale

- Gap between general practice medical settings and mental illness in the community.
  - General practitioners manage 75-90% of patients with mental illness
  - Need of comprehensive services provided by different coordinated agencies.  
(Keks, Altson, Sacks, Hustig & Tanaghow, 1997)
- Cognitive Behavioral Therapy (CBT) interventions and obesity treatment.
  - Cochrane Data Base System Review of 36 studies (3,495 individuals): CBT interventions resulted in significantly greater weight reductions than placebo.

# The Problem (2001)

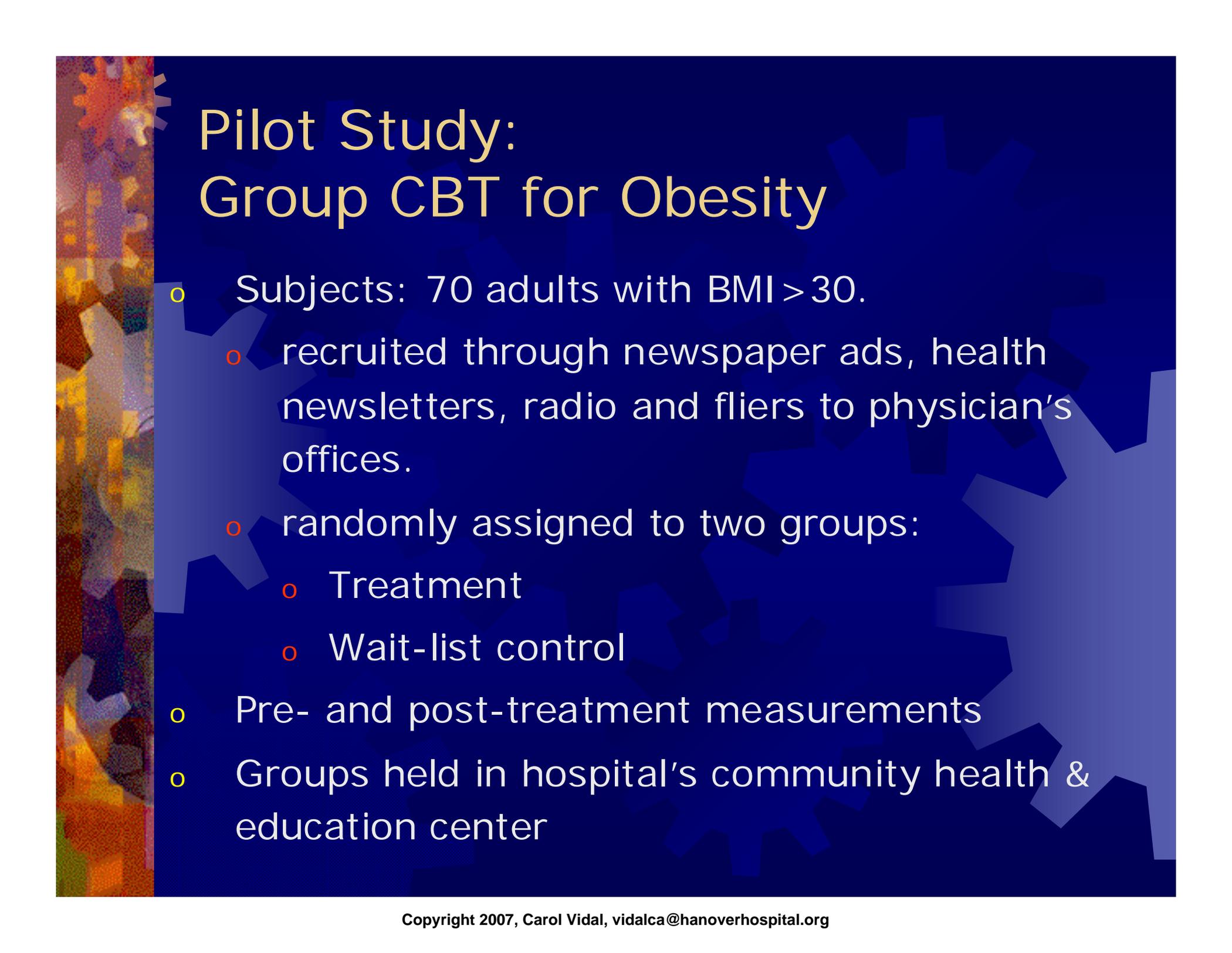
## Rates of Obestiy



	Pennsylvania	York County	Adams County
Percentage	17.50%	21.80%	26.60%

(Professional Research Consultants, 2001)



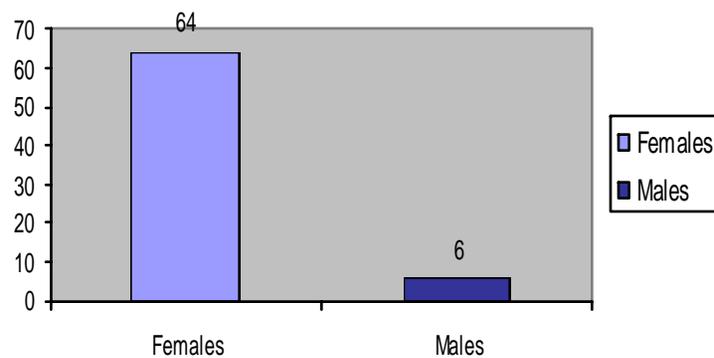


# Pilot Study: Group CBT for Obesity

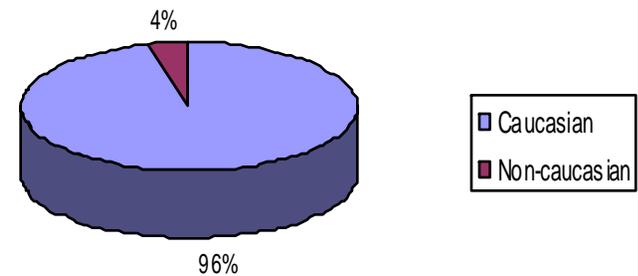
- Subjects: 70 adults with BMI > 30.
  - recruited through newspaper ads, health newsletters, radio and fliers to physician's offices.
  - randomly assigned to two groups:
    - Treatment
    - Wait-list control
- Pre- and post-treatment measurements
- Groups held in hospital's community health & education center

# Demographics

## Gender



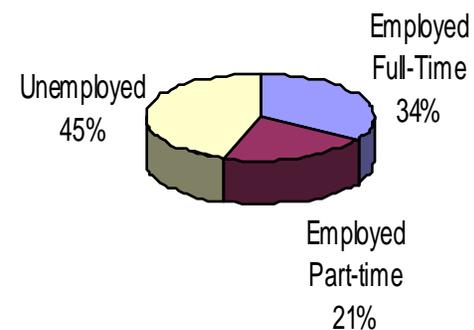
## Ethnicity



## Marital Status

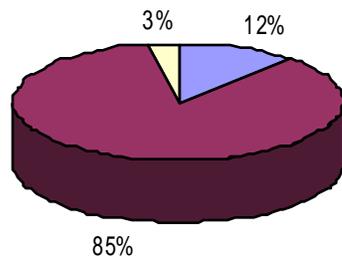


## Employment Status



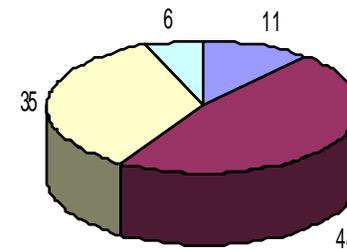
# Demographics

## Living Situation



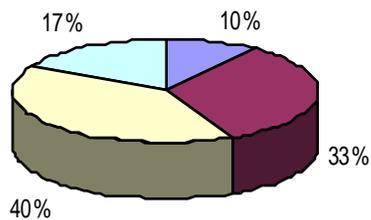
- Living Alone
- Living with Family
- Living with unrelated individuals

## Household Income



- Under 20,000
- 20 to 50,000
- 50 to 80,000
- More than 80,000

## Education



- Less than High School
- High School Graduate
- Some College or trade School
- College Graduate or More

Average age = 44 years

# Physical Measures

- Weight
- Height
  - Calculated BMI
- Waist & Hip Circumference
  - Calculated waist/hip ratio
- Blood Pressure

# Psychological Measures

- Beck Depression Inventory
- Beck Anxiety Inventory
- Rosenberg Self-Esteem Scale
- Quality of Life Inventory (Frisch, 1994)
- Stages of Change (Prochaska, 1991)
- Processes of Change (Prochaska, 1991)
- Decisional Balance (Prochaska, 1991)
- Self-Efficacy for Exercise (Prochaska, 1991)
  - <http://www.uri.edu/research/cprc/measures.htm>

# Treatment

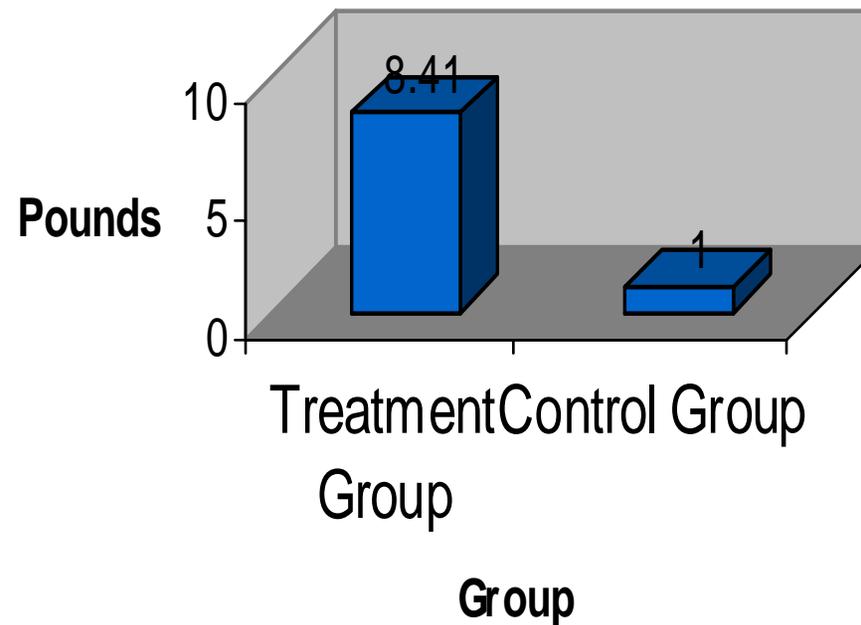
- o 12 Weeks
- o 90 minute group sessions of 10-13 members
- o LEARN (Brownell, 2005)  
[www.thelifestylecompany.com](http://www.thelifestylecompany.com)
- o Combination of educational, experiential and open processing
- o Used pedometers to track activity level
- o Read chapters weekly outside of group

# Results

- 37 Completers
  - 17 Treatment group
  - 20 Control group
- No significant differences between groups on demographic measures or pre-test measurements

# Weight

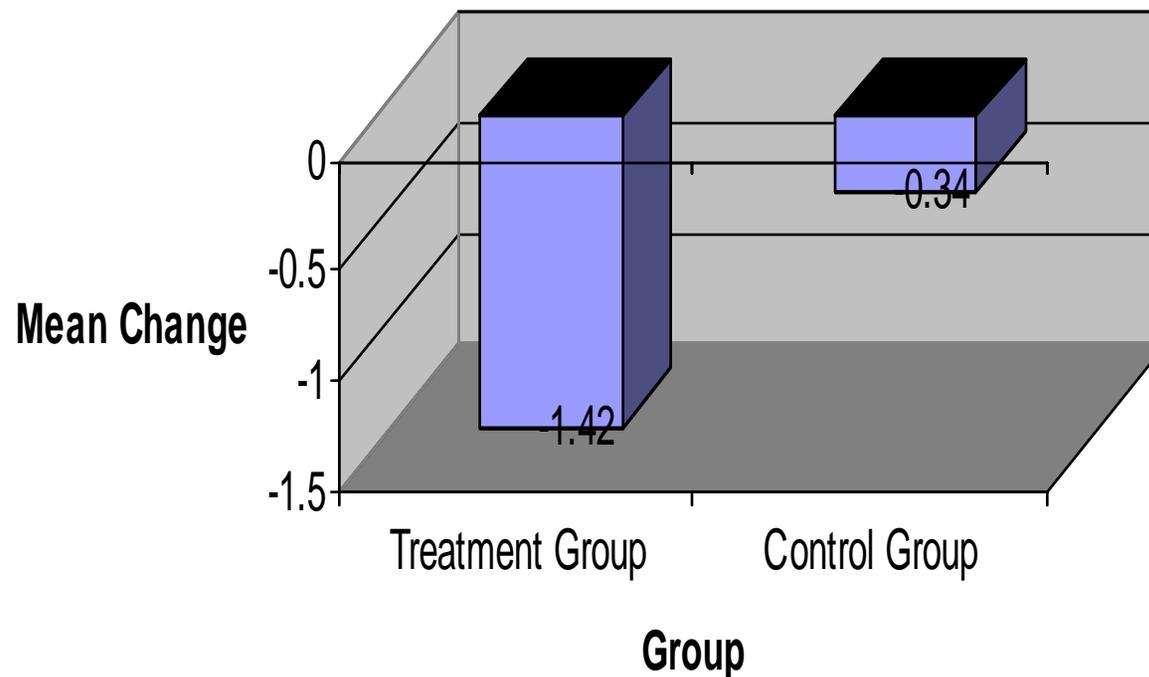
## Mean Weight Loss



Range = -29 lbs to +6 lbs vs. -7 to +6

# Body Mass Index

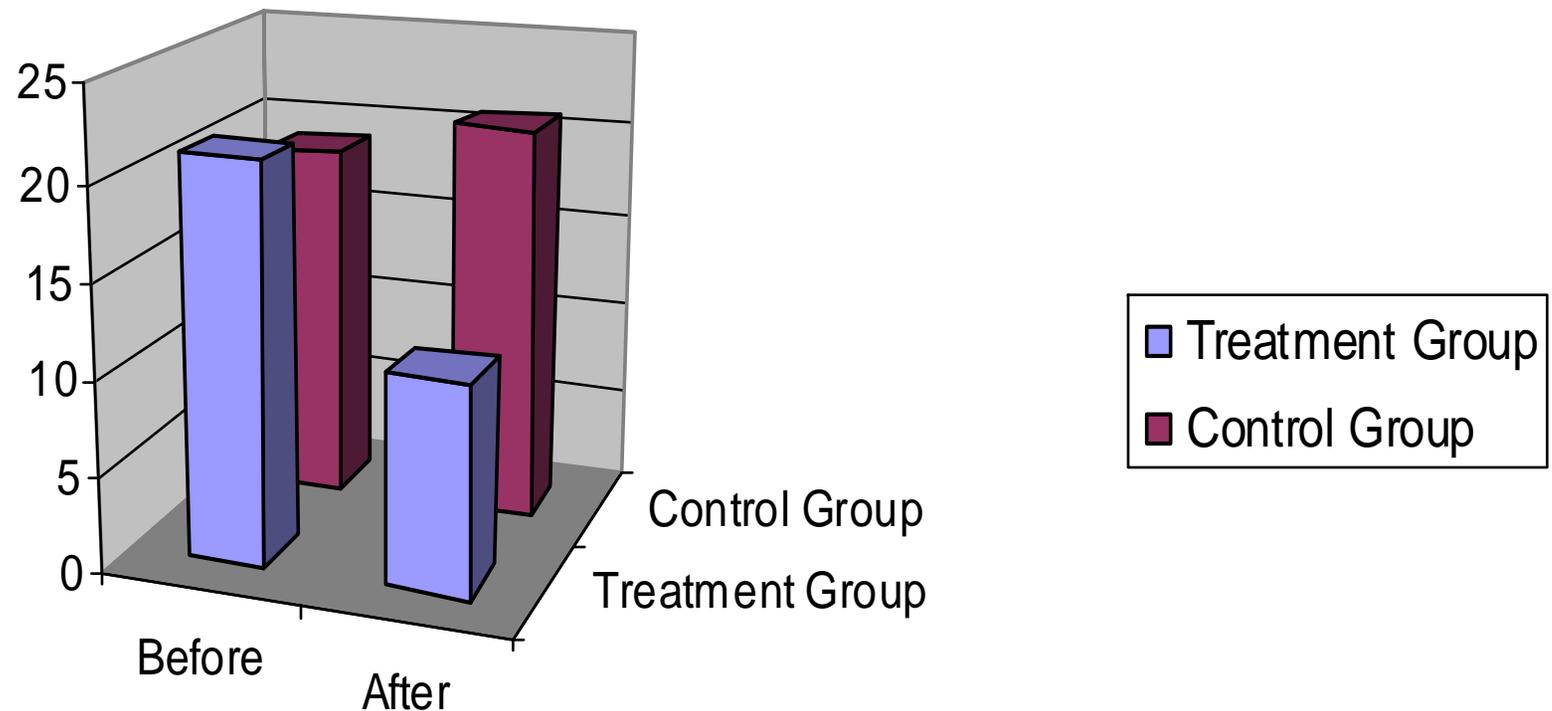
## Body Mass Index Loss



Range = -5.10 to +1.00 vs. -1.05 to +1.15

# Beck Depression Inventory

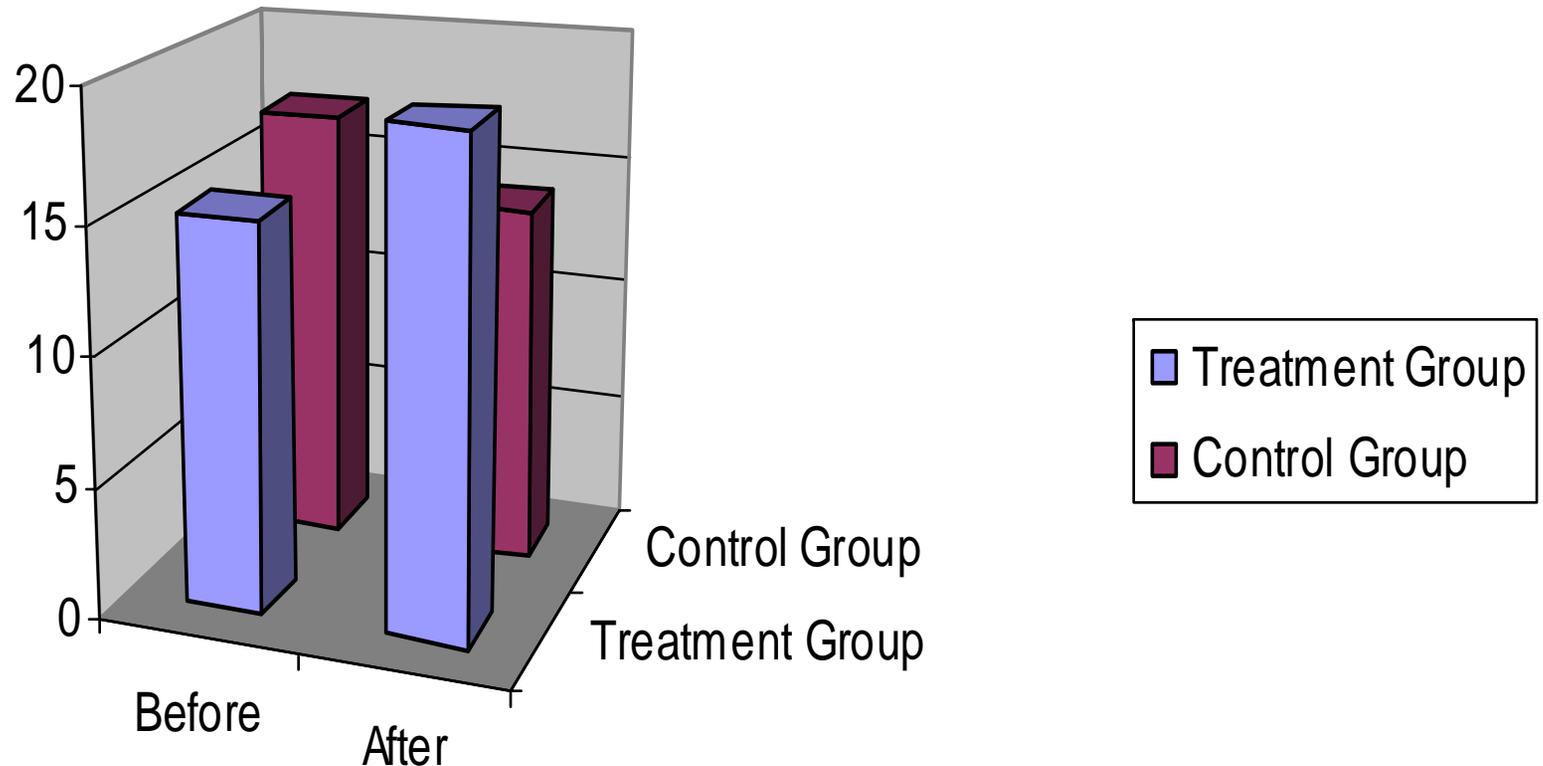
## Beck Depression Inventory



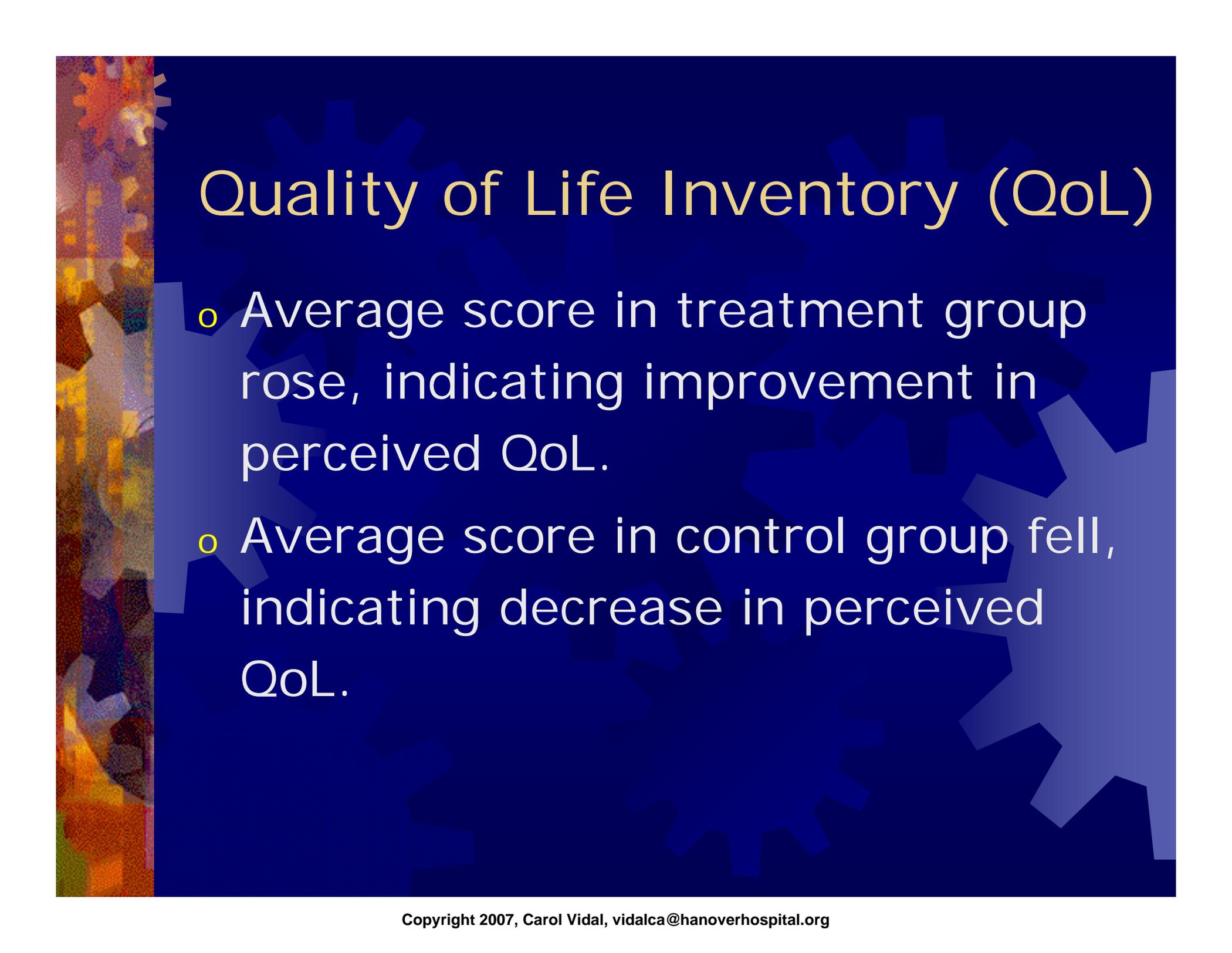
- **Treatment group:** Average score fell from 21 (moderate range) to 11 (mild range)
- **Control Group:** Average score rose from 19 to 21 (both in moderate range)

# Rosenberg Self-Esteem Scale

## Rosenberg Self-esteem Scale



- **Treatment group:** Average score rose from 15 to 19
- **Control group:** Average score fell from 17 to 14

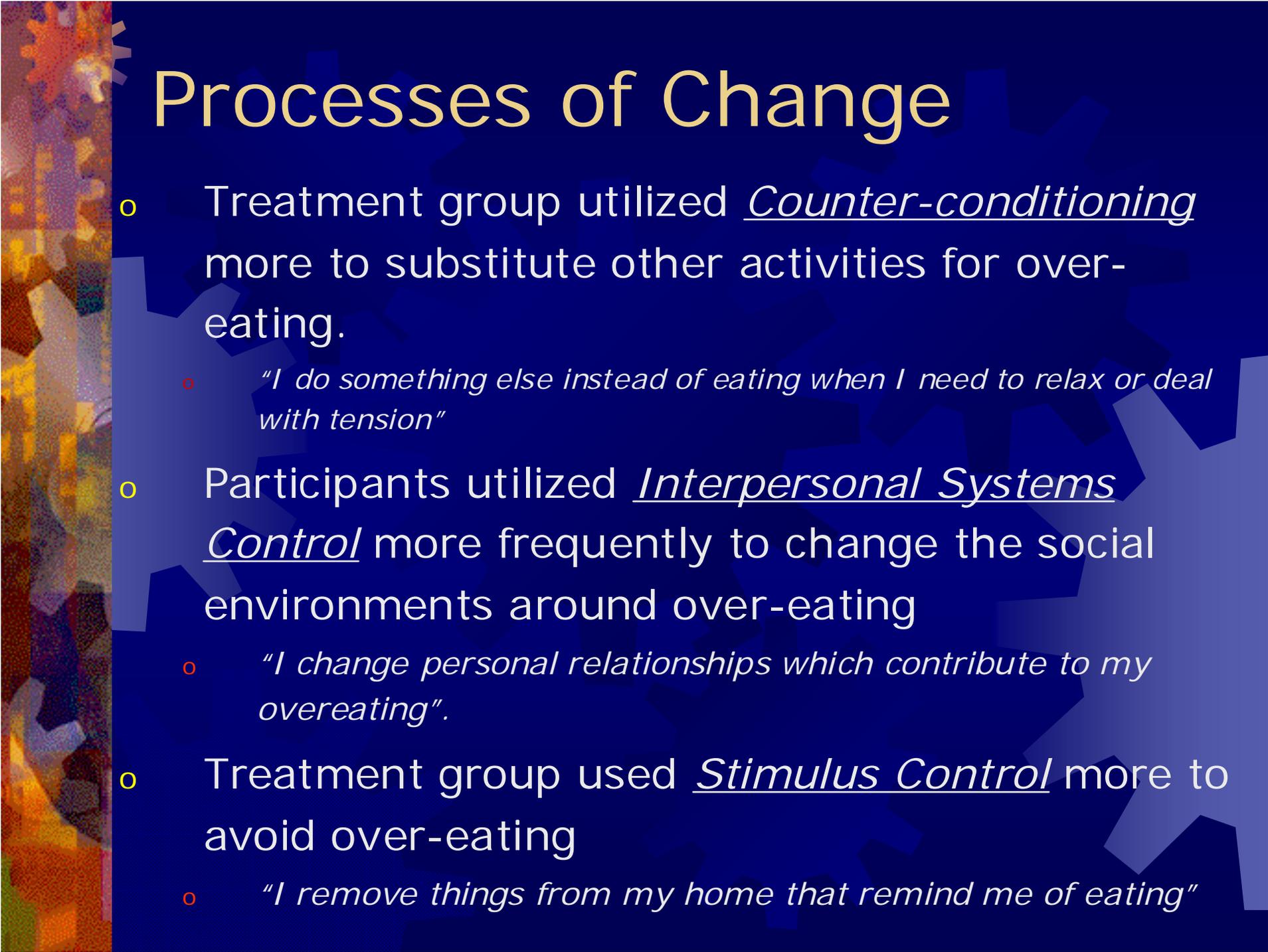


# Quality of Life Inventory (QoL)

- Average score in treatment group rose, indicating improvement in perceived QoL.
- Average score in control group fell, indicating decrease in perceived QoL.

# Stages of Change

- No significant differences between groups in regard to eating behaviors before or after treatment
  - Majority reported being in the action stage -actively trying to lose weight or avoid gaining weight
- More individuals in the treatment group reported being in the maintenance stage in regard to exercise after treatment phase.



# Processes of Change

- Treatment group utilized Counter-conditioning more to substitute other activities for over-eating.
  - *"I do something else instead of eating when I need to relax or deal with tension"*
- Participants utilized Interpersonal Systems Control more frequently to change the social environments around over-eating
  - *"I change personal relationships which contribute to my overeating".*
- Treatment group used Stimulus Control more to avoid over-eating
  - *"I remove things from my home that remind me of eating"*



# Self-Efficacy to Exercise

- Treatment group reported more self-efficacy to exercise than control group after treatment
  - Reported being more likely to exercise even in bad weather
  - Reported being more likely to exercise even if they were alone



# Related to Weight Loss...

- Pre-treatment BDI scores were negatively correlated with weight loss
- Pre-treatment Self-Esteem scores were positively correlated with weight loss
- Pre-treatment Self-efficacy to Exercise scores were positively correlated with weight loss

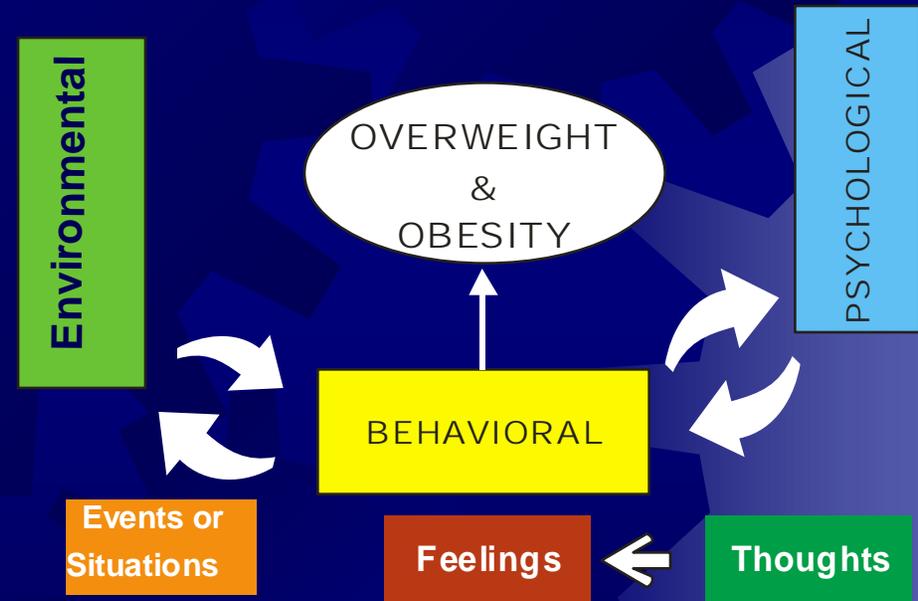
# Limitations of Study

- Small sample size
- Threats to external validity
- Lack of longitudinal data
- No ability to predict who will drop out of treatment

# Elements of Treatment

## Cognitive-behavioral orientation

- Helps individuals understand behavior
- Addresses thoughts & feelings behind behavior
- Identifies Environmental Influences
- Teaches skills
- Gives nutritional information



# Summary

- Collaborations between community providers enhances ability to promote psychological services related to physical health
- Mental health professionals are uniquely qualified to deliver interventions related to weight issues:
  - Behavioral strategies
  - Affect regulation
  - Cognitive interventions
  - Assessment for other disorders
  - Treatment for the whole person: mind, body, spirit

